deficiencies are common due to inadequate nutrition as the user keeps pushing beyond what the body can tolerate, which may lead to a rapid and noticeable loss of weight. There is lowered resistance to disease and prolonged use will cause damage to organs, particularly to the lungs, liver, and kidneys.

Continued use of methamphetamine can cause a heavy degree of psychological dependence on the drug which leads to a psychotic state, insomnia, anxiety, depression, and fatigue. Toxic psychosis similar to paranoid schizophrenia or delusional states can result from heavy short-term or long-term use. Prolonged use can also produce a heavy degree of psychological tolerance and users find they have to use heavier dosages.

Withdrawal from methamphetamine does not involve physical discomfort but can involve acute depression and fatigue. Impression can with critical proportions, in which life seems boring and unpleasant and may lead to thoughts of suicide or attempted suicide.

Progressive toxic effects are talkativeness, irritability, insomnia, anxiety, delirium, panic states, paranoid ideation, palpitation, cardiac arrhythmias, hypertension, circulatory collapse, dry mouth, nausea, vomiting, abdominal cramps, convulsions, coma, and death.

Other dangers include the rapid deterioration of physical and psychological health, since methamphetamines can erase feelings of periods of time and create the same sort of stress to the body that any long period of exertion creates. However, the user does not let his or her body recuperate and permanent damage or death is the result.

Common carriers for meth are opaque glass vials, paper bindles, or more commonly in Honolulu, clear heat-sealed cellophane packets. Common paraphernalia include syringes for the user who injects his or her drugs or glass smoking pipes (bongs).

There is a difference between a pipe used for cocaine and that used by the meth smoker. The basic difference is in the construction of the pipe.

The meth or ice pipe has only one section where the methamphetamine is placed and heated. There are no screens and no coolants in the meth pipe. The pipes used for smoking meth usually have a hole on the top of the bowl leading to the main chamber and may have a vent hole on the stem between the chamber, where the crystal is placed, and the mouthpiece. See figure 7-15.

The ice is first placed into the chamber and heated with a lighter or other heat source until it turns to a gas. The opening in the chamber and vent hole are sealed, usually with a finger, while the crystal is being heated. Once the crystal has turned to gas, it is inhaled by the user. A telltale sign of a meth user are burn marks on the finger(s) used to seal the hole in the main chamber.

Phenmetrazine (Preludin) and Methylphenidate (Ritalin)

The medical indications, patterns of abuse, and adverse effects of phenmetrazine (Preludin) and methylphenidate (Ritalin) compare closely with those of the other stimulants. They have been subject to abuse in countries where freely available, as they are here in localities where medical practitioners write prescriptions on demand. While the abuse of phenmetrazine involves both oral and intravenous use, most of that associated with methylphenidate results from injection after the drug in tablet form is dissolved in water. Complications arising from such use are common since the tablets contain insoluble materials that, upon injection, block small blood vessels and cause serious damage, especially in the lungs and retina of the eye.

Anorectic Drugs

In recent years a number of drugs have been manufactured and marketed to replace amphetamines as appetite suppressants. These so-called anorectic drugs include benzphetamine (Didrex), chlorphentermine (Pre-Sate, and so on), clortermine (Voranil), diethylpropion (Tenuate, Tepanil, and so on), fenfluramine (Pondimin), mazindol (Sanorex), phendimetrazine (Plegine, Bacarate, Melfiat, Statobex, Tanorex, and so on), phentermine (Lonamin, Adipex-P, and so on). They produce many of the effects of the amphetamines, but are generally less potent. Abuse patterns of some of them have not yet been established, but all are controlled because of the similarity of their effects to those of the amphetamines. Fenflurarnine differs somewhat from the others in that at low doses it produces sedation.

HALLUCINOGENS

Hallucinogenic drugs, both natural and synthetic, distort perception of objective reality. They induce a

state of excitation of the central nervous system, manifested by alterations of mood, usually euphoric, but sometimes severely depressive. Under the influence of hallucinogens, the pupils dilate and body temperature and blood pressure rise. The senses of direction, distance, and time become disoriented. A user may speak of "seeing" sounds and "hearing" colors. If taken in a large enough dose, the drug produces delusions and visual hallucinations. Occasionally, depersonalization and depression are so severe that suicide is possible. The most common danger is impaired judgment, leading to rash decisions and accidents. Persons in hallucinogenic states should, therefore, be closely supervised and upset as little as possible to keep them from harming themselves and others. Acute anxiety, restlessness, and sleeplessness are common until the drug wears off.

Long after hallucinogens are eliminated from the body, users may experience flashbacks—fragmentary recurrences of psychedelic effects—such as the intensification of a perceived color, the apparent motion of a fixed object, or the mistaking of one object for another. Recurrent use produces tolerance, which tends to encourage resorting to greater amounts. Although no evidence of physical dependence is detectable when the drugs are withdrawn, recurrent use tends to produce psychic dependence, varying according to the drug, the dose, and the individual user. It should be stressed that the hallucinogens are unpredictable in their effects each time they are used.

LSD (LSD-25, Lysergide)

Lysergic acid diethylamide (LSD) is derived from the lysergic acid present in ergot, a fungus that grows on rye. The only legitimate supply of LSD for scientific research is available through the National Institutes of Mental Health, Bethesda, Maryland.

LSD is a tasteless, odorless, colorless liquid in its pure state and is normally taken orally. On the illicit

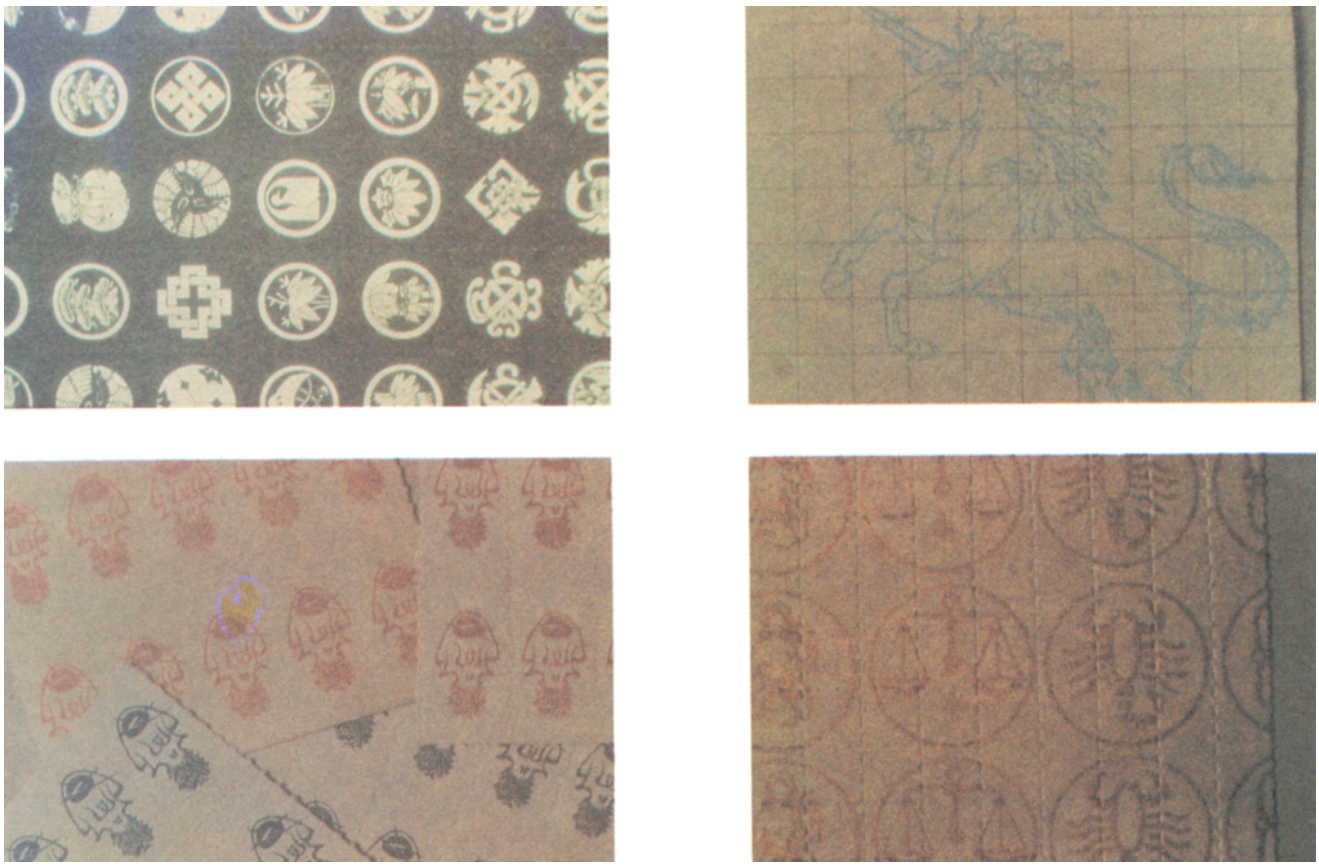

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Figure 7-16.—LSD blotter paper (100 hits per square).

market it can be found as a tablet, thin squares of gelatin (windowpanes), crystalline powder in various capsules, spots on paper squares (blotter acid) (fig. 7-16), or in liquid form in ampules. It is often impregnated in sugar cubes, cookies, or crackers and can be put on the back of postage stamps or on letter paper to be eaten by the receiver.

LSD is an extremely potent hallucinogen. One ounce of LSD contains a sufficient amount for about 300,000 doses or LSD experiences. A dose of 50 to 200 micrograms (or a quantity no larger than what may be put on the tip of a pin) would be sufficient for several trips. The average effective oral dose is from 30 to 50 micrograms but the amount of dosage in a unit varies greatly. The effects of higher doses persist for 10 to 12 hours.

LSD primarily affects the central nervous system by producing changes in mood and behavior and may cause central nervous system malfunctions. It may also dilate eye pupils, cause tremor, elevate temperature and blood pressure, and produce hyperactive reflexes in the user. Tolerance to behavioral effects of LSD develops quickly with several days of continued use. As with the other hallucinogens, physical dependence may not occur but minor mental dependence may develop.

Other manifestations of LSD include hallucinations, panic or paranoia, extreme anxiety, mental depression with suicidal thoughts or attempts, and "release" from reality to the point that the user does not know who or what he or she is. These are unpredictable reactions that may not be experienced by all users.

Mescaline

Mescaline, or peyote (fig. 7-17), is derived from the buttons of the peyote cactus that grows in Central America and the Southwestern United States. Mescaline is popular among the drug culture because it is thought to be a safe hallucinogen.

The use of mescaline and the chewing of dried peyote buttons have been practiced for centuries by various indian tribes, both as a medicine and as a part of religious ceremonies.

To facilitate ingestion by the user, peyote buttons are ground into powder, capsuled, and taken orally. Mescaline is available on the illicit market as a crystalline powder in capsules, or as a liquid in ampules or vials. Because of its bitter taste, the drug

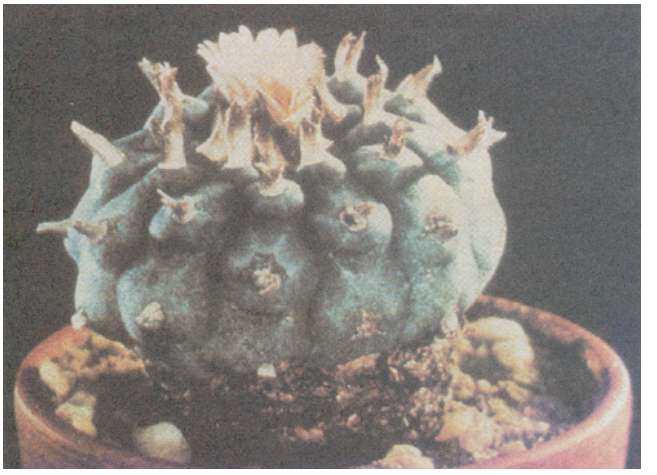

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Figure 7-17.—Peyote cactus.

is injected or eaten with food or beverage. A dose of 350 to 500 mg of mescaline produces illusions and hallucinations lasting from 5 to 12 hours and may create psychological dependence.

Psilocybin and Psilocyn

Like the peyote cactus, psilocybe mushrooms (fig. 7-18) have been used for centuries in traditional indian rites. When they are eaten, these "scared" or "magic" mushrooms affect mood and perception in a manner

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Figure 7-18.—Psilocybe mushroom.